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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/237,646	01/26/1999	VITTORIO CASTELLI	YO998-220	7219

7590 12/03/2002  
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EXAMINER

TRUONG, CAM Y T

ART UNIT	PAPER NUMBER
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2172

DATE MAILED: 12/03/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/237,646

Applicant(s)

CASTELLI ET AL.

Examiner

Cam-Y T Truong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 November 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5-8 is/are allowed.
- 6) ☒ Claim(s) 1,2,9 and 10 is/are rejected.
- 7) ☒ Claim(s) 3,4,11 and 12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. Claims 1-12 are pending in this Office Action.
2. Applicant's arguments filed 11/20/02 have been fully considered but they are not persuasive.

Applicant discussed that Machihara fails to teach the claimed limitation "first searching a database to retrieve data based on said query". However, Machihara teaches that a user enters search conditions indicating that he wishes to search for sumo-wrestlers who was born in Tokyo city and display the results in a spreadsheet A format. The searches can be performed in the wrestler table to select a wrestler name Takanohana whose born in prefecture is Tokyo. When the information retrieval section 140 receives the results, they are transferred to the interface section, where they are converted to a format to correspond with the input condition for display format = spreadsheet A and displayed on the user's monitor screen (col. 10, lines 5-35). This information shows that the system searches a database to retrieve data based on user's input.

Applicant also discussed that Machihara fails to teach database transformation and transformed database searching; accepting user input for query refinement; formatting search results is not the same as transforming a database based on user input. However, Machihara teaches that a user enters search conditions indicating that he wishes to search for sumo-wrestlers who was born in Tokyo city and display the results in a spreadsheet A format. The searches can be performed in the wrestler table to select a wrestler name Takanohana whose born in prefecture is Tokyo. When the

information retrieval section 140 receives the results, they are transferred to the interface section, where they are converted to a format to correspond with the input condition for display format = spreadsheet A and displayed on the user's monitor screen. Convert means to transform or to change from one form to another form. Thus, conversion of search results is same as transforming results or database. Also, the above information reads on the claimed limitation transformed database searching; accepting user input for query refinement" (col. 10, lines 5-35).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Machihara et al (USP 6233578).

As to claims 1 and 9, Machihara teaches the claimed limitations:

"first searching said database to retrieve data based on said query" as (col. 9, lines 30-65); "presenting retrieved data to user" as (col. 10, lines 1-20); "receiving user input" as (col. 9, lines 30-65);

"transforming said database based on said user input to generate a transformed database" as (col. 10, lines 15-20);

“successively searching said transformed database to retrieve data” as (col. 10, lines 15-20). Machihara fails to teach the claimed limitation “repeating step b through e until the results for the said query is satisfied by the user”. However, Machihara teaches after the user enter search request, the system retrieves data items based on user’s input and then converts the retrieved data items to a format corresponding with the input condition for display format = spreadsheet A and displays the result to the user (col. 9, lines 30-65; col. 10, lines 1-20). This information implies that it is obvious that the system have to repeat step b through e in order to return to the user a result. It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to modify Machihara’s teaching of after the user enter search request, the system retrieves data items based on user’s input and then convert the retrieved data items to a format corresponding with the input condition for, finally displays the result to the user in order to search or retrieve the data from database server and return the result to user’s desire efficiency.

5. Claims 2, 10 are rejected under 35 U.S.C.103(a) as being unpatentable by Machihara in view of Li et al (USP 6175829).

As to claims 2 and 10, Machihara teaches the claimed limitation subject matter in claims 1, 9, except the claimed limitation “reformulating the query based on said user input and wherein said searching said transformed database comprises searching said transformed database based on said reformulated query”. However, Li et al teach that selectivity of the alternative and the original criteria to reformulate query and additional types of feedback

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information may also be provided. With this feedback, the users know if the query criteria is too tight or too loose so that they can reformulate queries and retrieving a particular subset of images, which satisfy a condition specified in the sub-query (col. 5, lines 5-10; col. 3, lines 60-67- col. 4, lines 1-10). This information shows that in order to retrieve subset of images following user query, the system have to search images first by based on reformulate queries. It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Li's teaching of reformulate query and retrieving images to Machihara's system in order to provide a reduction in expensive multimedia query processing.

***Allowable Subject Matter***

6. Claims 3-4 and 11-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

As to claims 3 and 11, none of the available prior art of record teaches or fairly suggest extracting indices from said database and wherein said searching is preceded by retrieving indices to focus said search on indexed information in said database as recited in claim 3 and 11. Index querying service is well known in the art as taught Balogh and Graefe. However, prior art such Balogh and Graefe do not teach "extracting indices from said database and wherein said searching is preceded by retrieving indices to focus said search on indexed information in said data" in the specific combination as recited in claims 3 and 11.

As to claim 4 and 12 are objected because they are dependent on claim 3 and 11.

As claim 5-8 are allowed.

As to claim 5, none of the available prior art of record teaches or fairly suggest at least ....a multidimensional indexing engine at said at least.....a similarity query engine .....retrieved indices from said multidimensional indexing engine for identifying database areas to be search as recited in claim 5. Similarity engine and index generation component are well known in the art as taught by Bach and Graefe. However, prior art such Bach and Graefe do not teach "at least ....a multidimensional indexing engine at said at least.....a similarity query engine .....retrieved indices from said multidimensional indexing engine for identifying database areas to be search" in the specific combination as recited in claim 5.

As to claim 6-8 are allowed because they are dependent claim 5.

### ***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Contact Information***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cam-Y Truong whose telephone number is (703-605-1169). The examiner can normally be reached on Mon-Fri from 8:00AM to 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu, can be reached on (703-305-4393). The fax phone numbers for the organization where this application or proceeding is assigned is (703)-746-7239 (formal communications intended for entry), or: (703)-746-7240 (informal communication labeled PROPOSED or DRAFT).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703-305-3900).

Cam-Y Truong

8/15/02

  
KIM VU  
SUPERVISORY PATENT EXAMINER  
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